ANNEX I.
IMPLEMENTING A NATIONAL DISASTER MITIGATION PROGRAM FOR HOSPITALS

The objectives of this strategy are to ensure the performance of hospitals in the aftermath of a disaster (in this example, an earthquake). The strategy aims to:

- Reduce vulnerability,
- Implement the plan at a reasonable cost,
- Ensure the continuity of service.

1. ASSEMBLE A TEAM OF EXPERTS

This multi-disciplinary team should include engineers (structural, mechanical, civil, and sanitation engineers), architects, seismologists, etc. The team is responsible for considering the following aspects:

- Structure,
- Architectural elements,
- Lifelines,
- Equipment,
- Organization,
- Characteristics of the area surrounding the hospital (population, access, supporting infrastructure).

2. DESCRIBE THE HEALTH SYSTEM

Analyze the overall health system in terms of its past development and current organization. The analysis should include public sector facilities (ministry of health, social security, and military hospitals) and private hospitals. Interaction among the facilities and the level of complexity should be detailed.

3. ESTIMATE THE HAZARD

In the case of seismic hazards, general and local seismicity should be determined in terms of maximum intensities and local effects. If this type of information is

available for the region, it will be possible to estimate ground acceleration and expected displacement, and to establish design spectra.

The useful life of a hospital should be taken into account (30 years is a reasonable figure, both in terms of structural and functional characteristics). The level of acceptable risk is also defined (based on technical, economic, social, and political criteria).

4. CONDUCT A PRELIMINARY VULNERABILITY ANALYSIS

The first phase of the analysis is to prioritize the hospitals to be analyzed and to select the most appropriate strategy. Training should be carried out in a variety of sectors to ensure that the analysis is completed rapidly.

The vulnerability of a facility is quantified in terms of its structural, nonstructural, and organizational, or functional elements.

5. SELECT BUILDINGS FOR ANALYSIS

Priority is given to highly vulnerable structures in high risk zones.

6. MAKE A QUANTITATIVE EVALUATION OF STRUCTURES

This is a detailed analysis, and solutions are recommended based on specific standards.

- Review architectural, structural, and installation diagrams;
- Compare diagrams and structure to verify whether construction actually followed the original design;
- Analyze quality and characteristics of construction materials;
- Use mathematical models depending on seismic resistant classification;
- Calculate cost-effectiveness of retrofitting.

7. PRIORITIZE THE INVESTMENT IN PROJECTS

To prioritize projects for investment, the team must consider organizational, political, technical, and financial criteria. If there are not sufficient resources to implement measures in all hospitals, the work can be programmed in phases.

8. PRODUCE A DETAILED RETROFITTING PLAN AND ARRANGE FINANCING

In this phase, the retrofitting plan for a specific project is produced, taking into account that the hospital must remain operational while construction is under way. Ideally, financing should come from national sources.

9. EXECUTE THE MITIGATION PROJECT

ANNEX II.
SUMA—A HUMANITARIAN SUPPLY MANAGEMENT SYSTEM

The flood of relief supplies that arrive in the aftermath of a large-scale disaster often pose serious logistic and management problems for national authorities. To address these problems, the Pan American Health Organization, in conjunction with other international agencies and governments, initiated the Supply Management Project, known as SUMA, in 1992.[1] The main objective of this project is to strengthen national capacity to effectively manage humanitarian assistance supplies, from the moment donors commit to sending supplies, to the arrival and distribution of supplies at the site of a disaster. To this end, thousands of officers in more than 30 countries in the Americas and in other regions have received training.

In most countries in the Region of the Americas, SUMA focal points have been designated to coordinate the project. Among the institutions involved in the project are: ministries of health and other health agencies, civil defense or national emergency agencies, ministries of foreign relations, customs departments, Red Cross Societies, fire fighters, and nongovernmental organizations involved in humanitarian assistance.

In the immediate aftermath of large-scale disasters, especially in smaller countries, it may be unrealistic to count on local trained health professionals to sort through incoming medical supplies. PAHO/WHO provides logistical and technical support in mobilizing SUMA teams from nearby countries.

One of the most important features of SUMA is its flexibility. It can be used in many different emergency situations, and for response to natural disasters as well as in complex emergencies. The development and modification of the software has depended on constant feedback from national team members who have used it in a variety of disaster situations and training sessions.

[1]The SUMA software is copyrighted by PAHO, but is distributed free of charge in English, Spanish, and French. Copies of SUMA software and manuals are available on request from the Emergency Preparedness Program, PAHO/WHO, 525 23rd St., NW, Washington, DC 20037, USA; Fax (202) 775-4578, e-mail: disaster@paho.org, or from FUNDESUMA, Aptdo. 114, Plaza Mayor 1225, San José, Costa Rica, Fax: (506) 257-2139; e-mail: funsuma@sol.racsa.co.cr. The software and manuals also can be downloaded from the SUMA Web site (http://www.disaster.info.desastres.net/SUMA/) where announcements, information on emergencies, and related material can be viewed. Information on SUMA training can be obtained from the above addresses or PAHO/WHO Country Offices in countries of the Region of the Americas.

HOW DOES SUMA WORK?

SUMA team members attend a three-day course, after which they are able to apply SUMA in a disaster situation. The teams sort and label supplies, and employ user-friendly software to create an inventory of supplies and provide reports to disaster managers on the availability and distribution of items.

The system comprises three modules. The Central Level Module is set up at the Emergency Operations Center; the Field Unit Module is the basic data collection unit and operates at the points where supplies arrive during an emergency; and the Warehouse Management Module assists warehouse managers in stock control and distribution to peripheral levels. Another module assists in the management of requests to and offers from donors. Running SUMA software requires an IBM compatible 386 (or faster) computer, with 4 MB of available RAM, and 10 MB of available hard drive.

SORTING AND LABELING SUPPLIES

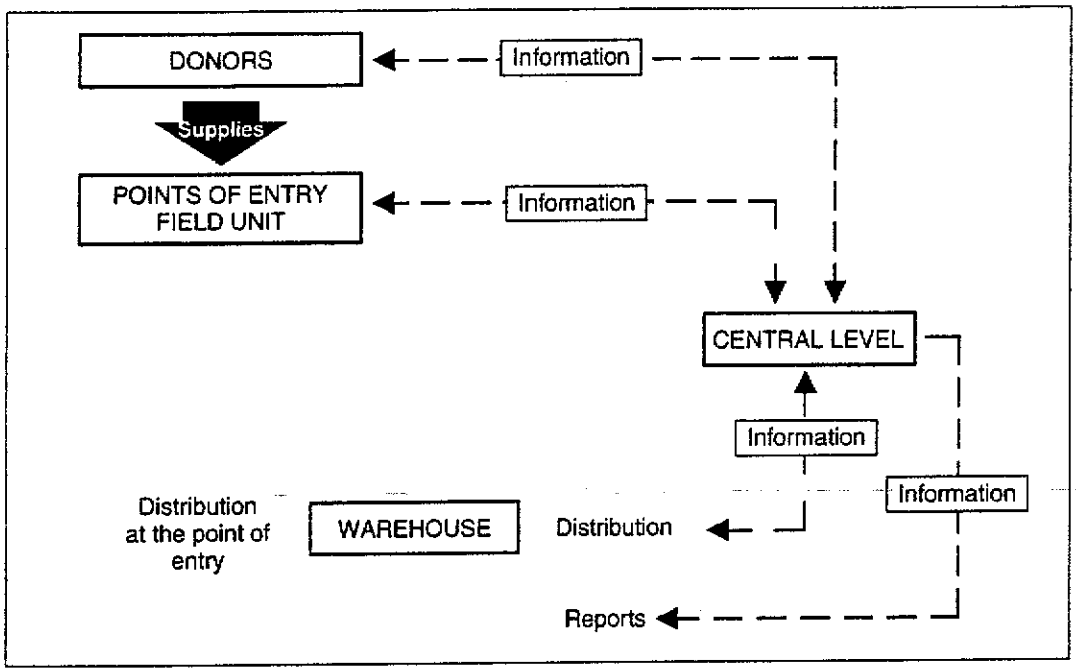
Information on supplies is collected at different points of entry of the disaster-affected country (e.g., airport, seaport, borders). Items are classified by category, subcategory, and item. Depending on the needs of disaster victims, supplies are sorted into different priority levels and labeled. Adhesive tapes, printed in English, Spanish, and French, are applied to each package received, showing three levels of priority. Urgently needed, or priority 1, items receive red labels, marked "Urgent! Immediate Distribution." Priority 2 supplies, that are useful but not urgently needed, receive blue labels, marked "Non-Urgent Distribution." Priority 3 items, which are of no use or require major time and effort to separate and classify, receive black labels marked "Non-Priority Items." There is space on the labels for writing the contents of the package, its weight, and destination.

After classifying supplies, their technical characteristics, potency, presentation, packaging units, total quantity, etc., are forwarded in electronic format to the central level (the Emergency Operations Center). Standard or customized reports can be easily generated for disaster coordinators, assisting them to monitor pledges from donors and identify gaps or duplications.

DISTRIBUTION AND STORAGE OF SUPPLIES

Once items have been sorted, classified, and inventoried, they are delivered to the consignees, or they are sent to an existing or temporary storage facility. SUMA teams work at warehouses and distribution hubs, managing information on the distribution of items from central to peripheral sites. All information regarding the distribution is transferred to the Emergency Operations Center.

ANNEX FIGURE II.1. Graphic overview of SUMA.



ANNEX III.
INTERNATIONAL HEALTH HUMANITARIAN ASSISTANCE

A REGIONAL POLICY FOR INTERNATIONAL RELIEF ASSISTANCE

After the traumatic disasters experienced in Mexico and Colombia in 1985, high-level delegates of the governments of Latin America and the Caribbean met in Costa Rica in 1986 with representatives from international agencies, donor countries, and NGOs to examine ways to make international health relief assistance more compatible with the needs of affected communities. The recommendations made at this meeting—approved unanimously by the participants—form the basis of the regional policy for the Pan American Health Organization (PAHO) regarding international health relief assistance. The essence of this policy, to which all Member Governments of PAHO adhere, is the following:

- Foreign health humanitarian assistance should be made only in consultation with officials designated by the ministry of health to coordinate such assistance.
- National health authorities should quickly assess needs for external assistance and immediately alert the international community to the specific type of assistance which is, or is not, needed. Priorities should be clearly stated, distinguishing between immediate needs and those destined to rehabilitation and reconstruction.
- Diplomatic and consular missions should communicate to donor countries firm policies on the acceptance of unsolicited or inappropriate supplies.
- To avoid duplication of health humanitarian assistance, full use should be made of PAHO's clearinghouse function to inform donors of pledged contributions and determine genuine health needs.
- Countries should give high priority to the preparation of their own health and medical personnel to respond to the emergency needs of the affected population. Donor countries and organizations should support such disaster preparedness activities.
- All countries must identify their vulnerability to disasters and establish appropriate measures to mitigate the impact on the most vulnerable populations.

MAKING DISASTER ASSISTANCE EFFECTIVE

International humanitarian assistance, if provided effectively, can play an important role in a country's development. The following are suggestions to donors

on how to avoid past mistakes and make international health assistance truly effective:

- **Don't stereotype the disaster.** The effects of disasters on health differ according to the type of a disaster, the economic and political situation in the affected country, and the degree to which the country's infrastructure has developed.
- **It is unlikely that medical personnel will be required from abroad,** given the capacity of Latin America and the Caribbean to mobilize health resources to respond to the immediate needs of disaster victims. In recent disasters, local health personnel treated injuries within the first 24 hours.
- **The need for search and rescue, life-saving first aid, and other immediate medical procedures is short-lived.** Special caution is necessary when considering international assistance that is useless once the acute emergency phase has passed. This type of assistance includes personnel, specialized rescue equipment, mobile hospitals, and perishable items.
- **International donors should not compete with each other to meet the most visible needs of an affected country.** The quality and appropriateness of the assistance is more important than its size, monetary value, or the speed with which it arrives.
- **Emergency assistance should complement, not duplicate, efforts taken by the affected country.** Some duplication is unavoidable as many countries and agencies worldwide hasten to meet the same needs, real or presumed. However, this need not have negative consequences if the assistance can be used later for rehabilitation and reconstruction.
- **Don't overreact to media reports for urgent, immediate international assistance.** Despite tragic images that may be shown, wait to get the overall picture and until pleas for aid have been formally issued.

ANNEX IV.
EXTERNAL AGENCIES PROVIDING HEALTH HUMANITARIAN ASSISTANCE

Every country is a potential source of health humanitarian assistance for some other disaster-stricken nation. Bilateral assistance, whether personnel, supplies, or cash, is probably the most important source of external aid. Several intergovernmental or regional agencies have established special funds, procedures, and offices to provide humanitarian assistance.

This annex uses selected examples to illustrate the broad variety of extranational agencies that provide health assistance after natural disasters. It is not intended to be a comprehensive list, and not all experienced and dedicated agencies providing valuable emergency assistance are included. Additional information and links to other humanitarian agencies are available on the Web sites listed.

UNITED NATIONS AGENCIES

United Nations Office for the Coordination of Humanitarian Affairs (OCHA)

The United Nations plays an important role in providing assistance in response to major humanitarian emergencies, as well as in promoting disaster reduction as part of the development plans of countries. The UN Office for the Coordination of Humanitarian Affairs (OCHA), which replaced the Department of Humanitarian Affairs in 1998, coordinates the UN System's response to major humanitarian emergencies, both natural and man-made, and promotes action to improve disaster prevention and preparedness. OCHA's responsibilities after disaster are, at the request of the disaster-stricken country, to assess needs, issue inter-agency appeals for funding humanitarian assistance, organize donor meetings and follow-up arrangements, monitor the status of contributions in response to appeals, and issue reports regarding developments.

The Resident Representative of the United Nations Development Program (UNDP) in individual countries reports to OCHA, and provides a channel for requests from governments to the international community. In addition, United Nations disaster management teams, country-level representatives of the U.N. agencies have been established in many countries, make arrangements to coordinate relief activities in anticipation of an emergency.

To permit rapid response to emergencies, OCHA has established a United Nations Disaster Assessment and Coordination Team (UNDAC), which can be de-

ployed immediately to an affected country to help local and national authorities determine relief requirements and carry out coordination.

New York office: OCHA, United Nations, S-3600, New York, NY 10017, USA
Geneva office: OCHA, United Nations, 8-14 ave. de la Paix, 1211 Geneva 10, Switzerland
Website: http://www.relifweb.int/ocha_ol

World Health Organization (WHO)

WHO is responsible for coordinating international health action. The Pan American Health Organization (PAHO) and other WHO regional offices act as focal points for national health authorities and donors after disasters in their respective areas.

WHO can provide technical cooperation in assessing health-related needs, coordinating international health assistance, managing the inventory and distribution of relief supplies (see Annex II), carrying out epidemiologic surveillance and disease control measures, assessing environmental health, managing health services, formulating cost estimates for assistance projects, and procuring humanitarian supplies. WHO and its regional offices can provide limited material assistance by reprogramming country development activities or from other sources.

WHO, Avenue Appia 20, 1211 Geneva 27, Switzerland
Website: http://www.who.int/eha

United Nations Children's Fund (UNICEF)

While primarily concerned with building health, education, and welfare services for children and mothers in developing countries, UNICEF also has mechanisms to meet their immediate needs in emergencies. Working closely with U.N. agencies and NGOs, UNICEF emergency interventions focus on the provision of health care, nutrition, water supply and sanitation, basic education, and the psychosocial rehabilitation of traumatized children. UNICEF has a substantial cash reserve for use in emergencies, allowing the diversion of funds from regular programs to emergency operations pending the receipt of donor contributions.

UNICEF, 3 United Nations Plaza, New York, NY 10017, USA
Website: http://www.unicef.org

World Food Program (WFP)

The WFP furnishes large amounts of foodstuffs in support of economic and social development projects in developing countries. In addition, it has substantial resources with which to meet emergency food needs, some of which can be furnished from project food stocks already in a disaster-stricken country. The WFP purchases and ships food needed in emergencies on behalf of donors, and cooperates closely with WHO in the nutritional monitoring of emergencies.

World Food Program, Via Cesare Giulio Viola, 68, Parco dei Medici, Rome 00148, Italy
Website: http://www.wfp.org

Food and Agriculture Organization of the United Nations (FAO)

The FAO provides technical cooperation and promotes investment in long-term agricultural development. It also works to prevent food shortages in the event of widespread crop failures or disasters. Through the Global Information and Early Warning system, the FAO issues monthly reports on the world food situation. Special alerts identify, for governments and relief organizations, countries threatened by food shortages. In both relief and short-term rehabilitation operations, FAO specialists are called on to help farmers re-establish production following floods, outbreaks of livestock disease, and similar emergencies.

FAO, Viale dell Terme di Caracalla, 1-00100 Rome, Italy
Website: http://www.fao.org

INTERGOVERNMENTAL ORGANIZATIONS

European Community Humanitarian Office (ECHO)

The European Union established ECHO in 1992 to oversee and coordinate humanitarian operations in non-member countries. ECHO works in partnership with NGOs, specialized United Nations agencies, and international bodies such as the International Committee of the Red Cross. In its first five years of existence, ECHO distributed emergency and reconstruction aid to areas of crisis in more than 60 countries. ECHO provides an important part of the operating budgets for humanitarian assistance for specialized U.N. agencies, and is the second largest donor to the World Food Program. It provides emergency aid, food aid, and aid to refugees and displaced people, in addition to investing in disaster prevention projects in high-risk regions.

ECHO, Rue Belliard 232, 1040 Brussels, Belgium
Website: http://europa.eu.int/comm/echo

Organization of American States (OAS)

The OAS is a regional agency that lends support to its Member States in assessing their vulnerability to natural hazards and mitigating the effects of disasters. It is active in technical assistance in development planning and project formulation and training projects. The OAS operates the Inter-American Fund for Assistance in Emergency Situations (FONDEM), which is administered by representatives from the OAS, the Inter-American Development Bank, and PAHO. Subject to the availability of voluntarily contributed funds, FONDEM provides food, medical supplies, and other relief to OAS Member States affected by disaster.

Center of Coordination for the Prevention of Natural Disasters in Central America (CEPREDENAC)

CEPREDENAC, an official organization within the System for Central American Integration, has worked since 1988 to build the capacity of institutions in Central America to reduce vulnerability to disasters. With headquarters in Panama, it pro-

motes disaster reduction in the region through exchange of information, developing common approaches to problem analysis, and developing regional strategies. In the aftermath of disasters, CEPREDENAC provides technical assistance in assessment and rehabilitation efforts.

CEPREDENAC, Aptdo. Postal 3133 Balboa, Ancón, Panama
Website: http://www.cepredenac.org

Caribbean Disaster Emergency Response Agency (CDERA)

CDERA is an intergovernmental regional disaster management organization established in 1991 by the Caribbean Community (CARICOM). CDERA has 16 participating states and has its headquarters in Barbados. CDERA's main function is to coordinate response to any disaster affecting participating states. Types of assistance provided or coordinated by CDERA include relief supplies, emergency communications, emergency management personnel, and financial assistance. CDERA also works with countries to strengthen their disaster management capacity.

Caribbean Disaster Emergency Response Agency, The Garrison, St. Michael, Barbados
Website: http://www.cdera.org

NONGOVERNMENTAL ORGANIZATIONS

Adventist Development and Relief Agency (ADRA)

In 1983, the Seventh-day Adventist World Service was reorganized under the name Adventist Development and Relief Agency. Active in development projects in 143 countries, ADRA also provides humanitarian assistance in disaster situations in the form of medical assistance, shelter, emergency supplies, and technical assistance.

ADRA Central Office, 12501 Old Columbia Pike, Silver Spring, MD 20904, USA
Website: http://www.adra.org

American Council for Voluntary International Action (InterAction)

InterAction is a coalition of some 150 US-based, non-profit international development, disaster relief, and refugee assistance agencies. InterAction conducts advocacy campaigns on behalf of its members, coordinates and promotes relief and development activities, and operates as an information clearinghouse.

InterAction, 1717 Massachusetts Ave. NW, Suite 801, Washington, DC 20036, USA
Website: http://www.interaction.org

CARE (Cooperative for Assistance and Relief Everywhere)

CARE International is a confederation of 10 national members in North America, Europe, Japan, and Australia. Based in Belgium, it manages more than 340 relief and development projects in 62 countries in Africa, Asia, Latin America, and East-

ern Europe. CARE USA, which oversees projects in Latin America, is based in Atlanta and provides emergency relief in the form of food, hand tools, and similar goods to disaster-affected communities. Its postdisaster projects include rehabilitation of water supply systems, rebuilding houses, and provision of basic sanitation or health facilities.

CARE USA, 151 Ellis Street, NE, Atlanta, GA 30303-2439, USA
Website: http://www.care.org

CARITAS Internationalis

CARITAS Internationalis is an international confederation of 146 Catholic organizations in 194 countries and territories. It promotes, coordinates, and supports emergency relief and long-term rehabilitation activities.

CARITAS Internationalis, Palazzo San Calisto 16, I-00120 Citta del Vaticano, Vatican
Web site: http://www.caritasint.org

Catholic Relief Services (CRS)

CRS, based in the United States, responds rapidly to emergencies by providing food, clothing, medical supplies, and shelter. Assistance is coordinated with the national CARITAS organization and the local Catholic clergy. CRS employs health professionals such as public health advisers and nutritionists who work closely with national health authorities.

Catholic Relief Services World Headquarters, 209 W. Fayette St., Baltimore, MD 21201-3443, USA
Website: http://www.catholicrelief.org

International Committee of the Red Cross (ICRC)

ICRC is a private, Swiss, and strictly neutral humanitarian organization based in Geneva. It works to protect and assist victims of armed conflict or disturbances. If a natural disaster should befall war refugees, for example, ICRC can provide aid in kind and services, particularly nutritional and medical assistance.

ICRC, 19 Ave. de la Paix, 1202 Geneva, Switzerland
Website: http://www.icrc.org

International Council of Voluntary Agencies (ICVA)

ICVA is an international association of nongovernmental, not-for-profit organizations who are active in the fields of humanitarian assistance and development cooperation. It does not implement relief or development projects itself, but provides an international liaison structure for voluntary agency consultation and cooperation.

ICVA, 48, chemin de Grand-Montfleury, 1290, Versoix, Switzerland
Website: http://www.icva.ch

International Federation of Red Cross and Red Crescent Societies (IFRC)

IFRC is an international humanitarian organization, composed of and representing 175 member national societies, with an international secretariat based in Geneva. It coordinates humanitarian assistance internationally and operates within an affected country through the member national society or its own staff if no local society exists. The IFRC obtains cash donations and specific emergency items through international appeals, and donates them through the national society.

Assistance provided by IFRC or national societies consists of food, shelter, water and sanitation, medical supplies, telecommunications, volunteer workers, and, in some cases, self-supporting field hospitals and medical teams. Its long experience and considerable flexibility and resources make it a most valuable nongovernmental source of support and cooperation with the health sector.

IFRC, PO Box 372, CH1211 Geneva 19, Switzerland
Website: http://www.ifrc.org

Lutheran World Relief Federation (LWR)

LWR represents Lutheran churches of various denominations in the United States. It can provide in-kind assistance following disasters as well as loans for long-term reconstruction.

Lutheran World Relief, 390 Park Avenue South, New York, NY 10016, USA
Website: http://www.lwr.org

Médecins Sans Frontières (MSF)

In 1971, a group of French doctors established MSF, a humanitarian aid organization that provides emergency medical assistance to vulnerable populations in more than 80 countries. In countries where health structures are insufficient or even non-existent, MSF collaborates with national health authorities, working in rehabilitation of hospitals and pharmacies, vaccination programs, and water and sanitation projects. In addition to providing medical teams, MSF transports and distributes emergency supplies.

Médecins Sans Frontières International Office, 39, Rue de la Tourelle-1040, Brussels, Belgium
Website: http://www.msf.org

Mennonite Central Committee (MCC)

MCC is the relief and development arm of the North American Mennonite and Brethren in Christ churches. Founded in 1920, MCC has more than 700 volunteers in 50 countries involved in food relief, agriculture, health, education, and social services. MCC provides volunteer personnel for cleanup, repair, and reconstruction, as well as emergency supplies in disaster situations.

Mennonite Central Committee, PO Box 500, Akron, PA 17501-0500, USA
Website: http://www.mennonitecc.ca

Oxfam (Oxford Committee for Famine Relief)

Oxfam was founded in England to send relief supplies to refugees in Europe during World War II. Today, Oxfam International is a network of 11 humanitarian organizations based in Australia, Belgium, Canada, Hong Kong, Ireland, the Netherlands, New Zealand, Quebec, Spain, the United Kingdom, and the United States. The focus of their work is to address issues of poverty, providing financial, technical, and networking assistance to grassroots groups undertaking community development. During disasters, Oxfam provides funding and technical support for immediate and long-term assistance. It has developed considerable expertise in managing refugee camps, nutritional relief, and housing projects.

Oxfam America, 26 West Street, Boston, MA 02111, USA
Website: http://www.oxfamamerica.org
Oxfam U.K., 274 Banbury Rd., Oxford, OX2 70Z, UK
Website: http://www.oxfam.org.uk

Salvation Army

Founded in 1865 in London, the Salvation Army works in more than 100 countries to provide social, medical, educational, and other community services. In disaster situations, national affiliates provide health-care assistance and emergency supplies. It also operates an emergency radio network that assists in family tracing through a network of radio ham operators.

Salvation Army International Headquarters, 101 Queen Victoria Street, London EC4P 4EP, UK
Website: http://www.salvationarmy.org

Save the Children Fund/Federation

Save the Children Fund (in the United Kingdom) and Federation (in the United States) are active in more than 65 countries. Involved in long-term development projects, in disaster situations they provide food, water, shelter, and other critical supplies, and assistance in reconstruction and rehabilitation of services.

Save the Children (U.S.), 54 Wilton Road, Westport, CT 06880, USA
Website: http://www.savethechildren.org
Save the Children (U.K.), 17 Grove Lane, London, SE5 8RD, UK
Website: http://www.scfuk.org.uk

Voluntary Organizations in Cooperation in Emergencies (VOICE)

VOICE is a network of European NGOs that are active in emergency aid, rehabilitation, disaster preparedness, and conflict prevention. Created in 1992, VOICE currently has about 65 members. The main purpose of VOICE is to foster links between the NGOs and facilitate their contact with the European Union, particularly ECHO.

VOICE, 10 Square Abiorix, B-10000 Brussels, Belgium
Website: http://www.oneworld.org/voice

World Council of Churches (WCC)

The Council is a fellowship of more than 332 Protestant and Orthodox denominations in 120 countries and territories around the world, with its headquarters in Geneva. Through its member churches, it provides humanitarian assistance after disasters.

World Council of Churches, PO Box 2100, 1211 Geneva 2, Switzerland
Website: http://www.wcc-coe.org

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ON-LINE INFORMATION SOURCES

The following documentation centers maintain on-line databases of their collections on disaster-related materials. Their web sites also provide links to other sites with disaster-related information.

Regional Disaster Information Center (CRID), San José, Costa Rica

The CRID collects and catalogues publications and papers primarily in English and Spanish on disasters, and distributes them worldwide. The database is available through the Internet and on CD-ROM.
Web site: *http://www.disaster.info.desastres/crid*

ReliefWeb, United Nations Office for the Coordination of Humanitarian Affairs

ReliefWeb compiles information on humanitarian emergencies from over 300 sources, including U.N. agencies, NGOs, governments, the academic community and the media. The site contains some 20,000 documents with information dating back to 1981.
Web site: *http://www.reliefweb.int*

Natural Hazards Information Center, Boulder, Colorado, U.S.A.

This center maintains an active Web site, and maintains a library with on-line access, and a collection of documents relating primarily to disasters and social sciences.
Web site: *http://www. colorado.edu/hazards*